

On the Common Hare of the Gangetic Provinces, and of the Sub-Himalaya; with a slight notice of a strictly Himalayan species. By B. H. HODGSON, ESQ., Resident at the Court of Nepal.

(*LEPUS MACROTUS ET OIOSTOLUS, NOBIS.*)

It has often been remarked that the ordinary type of the genus *Lepus* in the Gangetic provinces, differs materially from that of England, and it has been further alleged that the Hare of the Sub-Himalayan ranges of hills is not similar to that of the plains below them. No one however has, I believe, heretofore been at the pains to verify or refute these allegations, which I therefore now purpose to test, and to show that the former is sound, the latter unsound. I have specimens of the ordinary Hare of the plains and of the hills now before me, and after the most careful comparison, can discern no difference between them in size, proportions, or even in intensity of hue in the colours, further than as such every where varies with age, health, and seasons. The type therefore of this genus in the mountains and in their subjacent plains (on this side the Ganges at least) is the same; and of this species, which we shall call *Macrotus* (from the large size of its ears) the females are, as usual, somewhat larger than the males, being from snout to rump nineteen to twenty inches, with an average weight of 6 lbs. and a maximum of $8\frac{1}{2}$ to 9, whilst the males fall short by one inch or more of this size, and seldom surpass 5 lbs. in weight. The general structure and proportions are those of *Lepus timidus*, but the size is much less, the English hare being ordinarily 8 lbs. and frequently reaching 12 lbs.; and if I may trust my notes, as well as the fresh specimens now on the table before me, the females of *Macrotus* invariably have six teats, of which two are placed on the very top of the thorax, and four remotely from them in a parallelogram in the central part of the abdominal region. This is a noticeable circumstance if the six to ten mammæ of authors be ascribed to the genus with sufficient care, and if *Timidus*, or the European type, may be thence presumed to have ever more than six. If so, the invariably restricted number of mammæ in *Macrotus* will form one feature of specific independency; another will be deduced from its inferior size; and a third from the greater length of the ears as compared with *Timidus*, to which, in its general proportions and colours, it certainly bears a close resemblance; even in colours however, there is at least one material and constant difference, that whereas the dorsal aspect of the scut or tail in *Timidus* is black, in *Macrotus* it is of similar hue with the back, but paler. Nor do I notice in *Macrotus* any peculiarity of structure in the hair (towards tips enlarged, acuminate, and recurved) such as is ascribed to

that of *Timidus*. The general colour of the Indian Hare is a deep cinnamon red, copiously mixed with black on the body superiorly, but unmixed upon the limbs and front of the neck and chest, and also on the nape and dorsal aspect of the neck near it; pure white upon the head and body below, as well upon the insides of the limbs near it, upon the genital region, posterior margin of the buttocks, and whole inferior and lateral surfaces of the tail. The front of the upper lip, the margin of the mouth, a circle round the eye, and a line thence to the nostril are always pale, rufescent, hoary, or purer white, and so also the bases of the ears dorsally, and a strip thence continued towards the shoulders, and bounding the purely ruddy hue of the soft nape. The superior margin of the ears on both sides is black, but the general hue of the fur on the ears anteally is similar to that of the head, whilst posteally and interiorly the ears are nearly nude. The mustachios (which are not undulated) are half black and half white, and though the arms or cubits are usually unmixed with black, yet this is not always the case, the animal in very high fur having the cubits, like the tibiae (externally) powdered with black. The fur in general is very rich, full, and soft, both the woolly and hairy portions, the former of which seldom exceeds an inch in length, whilst the latter varies from $1\frac{1}{8}$ to $1\frac{1}{2}$ inch. The hair has mostly four rings from the base, thus—bluish hoary, black, red, and black. The wool wants the terminal black ring every where, and is for the most part white, but ruddy apically: the hair wants it on the purely red parts of the animal, such as the abdominal aspect of the neck and the limbs; and both wool and hair are devoid of all rings, and wholly white upon the belly and parts adjacent, as well as upon the inferior surface of the head. Some hairs are wholly black or dusky on the back; but in general besides its bluish hoary base, every hair on that surface of the animal, has two black rings divided by a red one, which latter is of a deep cinnamon hue, almost exactly, or if the reader pleases, brownish-red. The buttocks posteally are less dashed with black than the middle of the back, which in fine furred animals is very dark: but the ordinary dorsal colouring of the hair and wool prevails on the buttocks, as well as on the dorsal aspect of the tail, both parts being like the back, though somewhat paler. Occasionally the wool and base of the hair are dusky, rather than hoary, and the intensity of the red hue, as well as the quantity of black tipt hairs, depend on health, age, and season, both in the hills and the plains. There are of course five digits on the fore extremities, and four on the hind ones, but the thumb consists of a nail only, and the other anterior digits are gradated, as in our hand; whilst in the posterior extremities the central digits are equal, and of the

laterals the interior is the longer. The mustachios are ample, extending much beyond the base of the ears, not harsh, nor adpressed, nor undulated as in *Timidus*, and of many lengths. Above the eye are four to six lesser bristles, and two or three longer ones below it on each cheek. Eyes remote, and much nearer to the ears than to the snout; ears considerably (or $\frac{1}{5}$) longer than the head, so that when pulled forward they may be extended from $1\frac{1}{2}$ to 2 inches beyond the tip of the nose. Head compressed, and arched entirely along the vertical line. Scut without the hair extending only half way from the knee towards the heel of the straightened leg, and with the hair falling considerably short of the os calcis.

The following dimensions will complete the illustration of this species as found in the mountains and plains.

	Plains.			Hills.		
	Mas.			Mas. Fœm.		
Snout to base of scut,	1-6	1-6	1-7			
Snout to occiput straight,	4	4	$4\frac{1}{8}$			
Ditto ditto, by curve,	$4\frac{3}{4}$	$4\frac{3}{4}$ plus	$4\frac{3}{4}$			
Snout to fore angle of eye,	2 less	2 plus	2			
Thence to antea base of ear,	$1\frac{7}{16}$	$1\frac{7}{16}$	$1\frac{1}{2}$			
Ears length from scull,	$4\frac{3}{4}$	$4\frac{3}{4}$	5			
Ditto ditto from anterior inner base,	$3\frac{5}{8}$	$3\frac{5}{8}$	$4\frac{1}{2}$			
Width between eyes,	$1\frac{3}{4}$	$1\frac{1}{4}$	$1\frac{6}{16}$			
Scut only,	$3\frac{1}{2}$	$3\frac{5}{8}$	$3\frac{5}{8}$			
Scut and hair,	$4\frac{7}{8}$	5	5			
Olecranon to carpus,	$3\frac{11}{16}$	$3\frac{10}{16}$	$3\frac{11}{16}$			
Thence to tip, long finger (not nail,)	2	2	$2\frac{1}{16}$			
Tibia or knee to os calcis,	$4\frac{14}{16}$	$4\frac{15}{16}$	$5\frac{1}{16}$			
Thence to tip long toe (not nail,)	$4\frac{1}{16}$	4	$4\frac{1}{4}$			
Girth behind shoulder,	$9\frac{1}{2}$	$9\frac{3}{4}$	$10\frac{1}{2}$			
Weight (very thin)	$4\frac{1}{2}$ lbs.	$4\frac{1}{2}$ lbs.	5 lbs.			

The following specific character may perhaps serve to distinguish our animal: *Lepus macrotus*, with black tipped ears longer than the head. General colour, full cinnamoneous red, shaded above with a black: tail dorsally concolovous with the buttocks, head below and belly pure white: in size less than *Timidus*. Snout to rump 18 to 20 inches, and weight 5 to 7 lbs. Head (straight) 4. Ears five inches. *Habitatt.* Gangetic plains and sub-Hemalayas. Of the Tibetan species I possess only some wretched remains, which enable me however to indicate the species thus:—

Lepus Oïostolus, with fur consisting almost wholly of wool, considerably curved and interspersed rarely with very soft hairs. Slaty grey blue for the most part and internally, but externally fawn-tinted above, and whitish below and on the limbs: some hairs on the back tipped with black beneath a subrufous ring. Tail white, with a grey blue strip towards the back. Apparent size of the last. *Habitatt*, the snowy region of the Hemalaya, and perhaps also Tibet.

Hares of the first species are exceedingly abundant in the Nipalese Tarai and British districts near it, but less so in the mountains, though there also they may be found in most districts wherein the declivities of the mountains are not very precipitous nor wholly covered with dense forest. Hares love the lower and more level tracts within the mountains, where grassy open spots are interspersed with copsewood under which they may safely rest and breed; for in the mountains the hare never resorts to holes or burrows; nor, I believe, voluntarily in the plains, though I have heard the assertion that it does so. In the plains patches of grass interspersed with cultivation are the favourite resorts of this species, or Jhow shrubberies fringing the banks of nullahs, where, occasionally the animals congregate in numbers wholly unknown to the mountains. The Indian Hare, or *Macrotus*, breeds frequently during the whole year, and produces usually two young ones at a birth. The young are born with the eyes open, and furnished with teeth. In June 1835 I took two from the left horn of the uterus (none in the right) of a female; and these young, though unborn, had the eyes open, and the fur quite perfect. In fact, the young follow their dam as soon as they are born.

CATHMANDOO,
February 1841.

Nepal, March 1st, 1841.

The account of the Hares which I sent you was written *currente calamo*, and without my being at the trouble to look (shame on me) at my own Catalogue of Mammals apud Linnæan Transactions, where the Hare of the plains is named *Indicus*, and that of the Himalaya *Æmodius*. These names might do, and changes are bad: but tropical appellations are objected to, and in the plains there is another Hare, *Nigricollis*, wherefore the names affixed to my paper with you should perhaps stand; but a note at the foot of the page should identify them with *Indicus et Æmodius* respectively of the Catalogue, thus: "These species are named respectively *Indicus* and *Æmodius* in my published Catalogue. Nor perhaps was it worth while to drop the local appellations, though *Nigricollis* constitute a second species in the plains of India."

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